In the Claims:

- 1. (Currently Amended) A method for dynamically determining a lock form in a multiprocessor, comprising:
 - (a) maintaining first and second system-wide measures of read and write acquisitions; and
 - (b) determining a lock form based upon at least some of said measures, wherein said determination of said lock is independent of a lock lifetime.
- 2. (Currently Amended) The method of claim 1, wherein said lock form is selected from the group consisting of: a distributed reader-writer lock, a centralized reader-writer lock, and an exclusive lock.
- 3. (Currently Amended) The method of claim 2, wherein said exclusive lock form is selected from the group consisting of: a test and set lock, a test and test and set lock, a queued lock, a ticket lock, and a quad-aware lock.
- 4. Cancelled
- 5. (Currently Amended) The method of claim 1, wherein the lock form is a distributed reader-writer lock, and wherein said determining step is responsive to the system-wide measure of write acquisitions and the system-wide measure of read acquisitions.
- 6. (Original) The method of claim 5, wherein said determining step is further responsive to a quantity of units in the system.
- 7. (Original) The method of claim 6, wherein said unit is selected from a group consisting of: a CPU, a thread, a processor, a transaction, a co-routine, a thread in a multi-threaded architecture, a NUMA module, and a task.

- 8. (Currently Amended) The method of claim 1, wherein the lock form is a centralized lock, and wherein said determining step is responsive to the system-wide measure of write acquisitions and the system-wide measure of read acquisitions.
- 9. (Original) The method of claim 1, further comprising maintaining a system-wide measure of read-hold duration.
- 10. (Original) The method of claim 9, wherein the step of maintaining a system-wide measure of read-hold duration includes maintaining a measure of read-hold duration by a unit.
- 11. (Original) The method of claim 10, wherein said unit is selected from a group consisting of: a CPU, a thread, a processor, a transaction, a co-routine, a thread in a multi-threaded architecture, a NUMA module, and a task.
- 12. (Currently Amended) The method of claim 9, wherein the lock form is a centralized lock, and wherein said determining step is responsive to the system-wide measures of read acquisitions and read-hold duration.
- 13. (Currently Amended) The method of claim 9, wherein the lock form is an exclusive lock and wherein said determining step is responsive to the system-wide measure of read-hold duration.
- 14. (Original) The method of claim 13, wherein said determining step is further responsive to the system-wide measure of read acquisitions.
- 15. (Original) The method of claim 1, further comprising periodically updating at least some of said system-wide measures.
- 16. (Original) The method of claim 1, wherein at least some of said second system-wide measures are selected from a group consisting of: a digital filter, a weighted average, a

sliding window average, a finite impulse response, and a central data structure.

17. (Currently Amended) A computer system comprising:

multiple processors;

first and second system-wide measures of read and write acquisitions of said processors; and

a lock manager adapted to select a lock form responsive to at least some of said measures, wherein said lock selection is independent of a lock lifetime.

- 18. (Currently Amended) The system of claim 17, wherein said lock form is selected from a group consisting of: a distributed reader-writer lock, a centralized reader-writer lock, and an exclusive lock.
- 19. (Currently Amended) The system of claim 18, wherein said exclusive lock form is selected from a group consisting of: a test and set lock, a test and test and set lock, a queued lock, a ticket lock, and a quad-aware lock.
- 20. (Currently Amended) The system of claim 17, wherein the lock form is a distributed reader-writer lock, and wherein said lock manager is responsive to the system-wide measure of write acquisitions and the system wide measure of read acquisitions.
- 21. (Currently Amended) The system of claim 17, wherein the lock form is a centralized lock, and wherein said lock manager is responsive to the system-wide measure of write acquisitions and the system-wide measure of read acquisitions.
- 22. (Currently Amended) The system of claim 17, wherein the lock form is a centralized lock, and wherein said lock manager is responsive to the system-wide measure of read acquisitions and a system-wide measure of read-hold duration.
- 23. (Currently Amended) The system of claim 17, wherein the lock form is an

exclusive lock and wherein said lock manager is responsive to a system-wide measure of read-hold duration.

- 24. (Currently Amended) In a multiprocessor system, an article comprising: a computer-readable signal bearing medium;
 - means in the medium for maintaining first and second system-wide measures of read and write acquisitions; and

means in the medium for selecting a lock form responsive to at least some of said measures, wherein said means for selecting said lock is independent of a lock lifetime.

- 25. (Original) The article of claim 24, wherein the medium is selected from a group consisting of: a recordable data storage medium, and a modulated carrier signal.
- 26. (Currently Amended) The article of claim 24, wherein said lock form is selected from a group consisting of: a distributed reader-writer lock, a centralized reader-writer lock, and an exclusive lock.
- 27. (Currently Amended) The article of claim 24, wherein the lock form is a distributed reader-writer lock, and wherein said means in the medium for selecting a lock form is responsive to the system-wide measure of writer acquisitions and the system wide measure of read-acquisitions.
- 28. (Currently Amended) The article of claim 24, wherein the lock form is a centralized lock, and wherein said means in the medium for selecting a lock is response to the system-wide measure of write acquisitions and the system-wide measure of read acquisitions.
- 29. (Currently Amended) The article of claim 24, wherein the lock form is a centralized lock, and wherein said means in the medium for selecting a lock form is responsive to a system-wide measure of read acquisitions and a system-wide measure of read-hold duration.

- 30. (Currently Amended) The article of claim 24, wherein the lock form is an exclusive lock and wherein said means in the medium for selecting a lock form is responsive to a system-wide measure of read-hold duration.
- 31. (Original) The article of claim 24, wherein at least some of said second system-wide measures are selected from a group consisting of: a digital filter, a weighted average, a sliding window average, a finite impulse response, and a central data structure.